



NORDIC ENVIRONMENTAL STUDY COUNCIL – NESCO RY



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We don't talk, we act!



Whilst many organizations worldwide talking on “plastic pollution” our recent conference in Stockholm with more than 400 participants decided to take real action starting with our first giant project in the Philippines.

It is surely useless to explain the presence of debris in rivers and oceans all over the world.

Same closer details you'll find in internet on various sites or a “nice” documentation by Greenpeace from the Philippines (in German language): <https://gpn.greenpeace.de/themen/meere/die-plastikflut/>

More than 13 mio tons of plastic debris of all kind will be dumped yearly into the rivers and oceans all over the world. Additionally uncounted cans, rubberproducts and even hazardous waste will be dumped. Most critical are some South East Asian countries, India and Africa, but also the Mediterranean Sea and America are dumping sites. - Even the Antarctic region is not saved from our environmental sins.

We all should know specially the plastic debris is most dangerous for fishes and birds and getting into the food chain and will harm last not least US!



Plastic contaminated Albatros

One of the most polluted areas are the Philippine rivers and seas and the Government there is helpless against this catastrophe. The Philippines have the most differ animal life in the world and the population there is traditionally independent from the fishing industry.



What we decided?

We are going to build with our partners in the Philippines a shipyard for smaller debris collecting boats and river / shore side skimmer barges with a capacity of 30 boats and 80 barges yearly.

The skimmer vessels have a capacity of 5 tons per hour, the barges have a payload of 7,5 tons, enabling towing, lifting, transportation on light weight trucks (like Mitsubishi Canter).

Location of the shipyard: Anda, Pagasinan, Luzon, Philippines

The main idea is to collect the swimming and shore debris first.

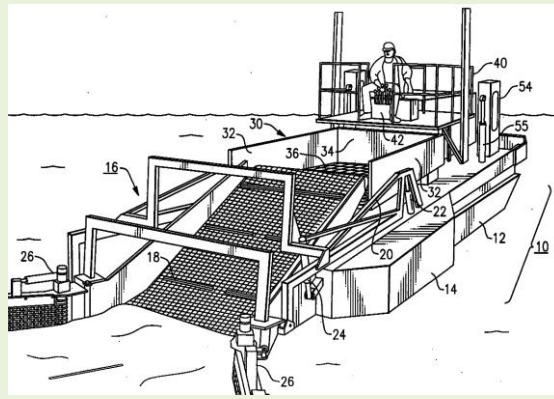
The barges will collect the debris, which will be brought to local dumpsites where the trash will be sorted by its kind and, wherever possible, recycled or under strict control burned. The dumping sites will be controlled and supervised by us. Fossile debris (like wood, plants, leaves) will be dried and shredded and will be used as natural fertilizer.

Our solution: BATOIDEA IV

Basic for our skimmer vessels will be a vessel based the TrashCat TM (see <http://www.mudcatdredge.com/trash-skimmer-vessels/>). In the USA, those skimmer boats have been in use since the early 1980s. United Marine International manufactures the Trash Cat, which comes in 3 sizes (pictures below). Several 100 of them are in use worldwide. They are capable of collecting up to 1200 cubic feet (34 cubic meters) of floating debris per load. US company "Alpha Boats" sells similar machines. – However producing those vessels in the Philippines is much cheaper than importing from overseas.

Actually, there are thousands of abstract visions on trash skimmer vessels from all over the world. Newest innovations come with a price tag of many 100.000 US \$, even up to 1 Million Dollar. Those kinds of innovations are not useful for 3rd world countries where communities don't even have sufficient money for useful and efficient trash collection trucks. Our idea is to rely on simple working systems which are also cost efficient and more or less service free enabling communities to rent, buy, operate and maintenance as a simple solution.

Our Batoidea IV is generally based on the TrashCat and modified. Even our system will be powered by a Diesel engine, we are using CME (Cocomethylester) as fuel and maybe in next step using our recycled plastic as fuel. – Negotiations with Chinese and Japanese developers are on the way.



The production costs will be US \$ 30.000 /boat, whilst the barges will cost 4.500 US \$/ piece. Trucks needed to be upgraded with a special loading device/crane (US \$ 3000/ piece).

Additionally the shipyard will employ some 20 workers, which is for that structurally weak area another benefit.

For this project we need a capital of 2.4 Mio US \$, up to now we have already donations/sponsors of 450.000 US \$ thanks to many small donations, as also sponsors from industry.

The running costs will be sponsored by the leading Philippine Department chain group, which are selling linen bags instead of plastic bags and donating parts for our project. – Specific cost calculation available upon request.

We need your support!

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